



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,364	01/30/2004	John Joseph Curro	8590D	6547

27752 7590 05/11/2006

THE PROCTER & GAMBLE COMPANY  
INTELLECTUAL PROPERTY DIVISION  
WINTON HILL TECHNICAL CENTER - BOX 161  
6110 CENTER HILL AVENUE  
CINCINNATI, OH 45224

EXAMINER

MCCLELLAND, KIMBERLY KEIL

ART UNIT	PAPER NUMBER
----------	--------------

1734

DATE MAILED: 05/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/768,364	<b>Applicant(s)</b> CURRO ET AL.	
	<b>Examiner</b> Kimberly K. McClelland	<b>Art Unit</b> 1734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 09 March 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 9-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 9, 11, and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harlow (US Patent No. 4,000,348) in view of Hairabedian (US Patent No. 3,459,609).

Regarding claim 9, Harlow discloses a method of creating an electrical. The method includes providing first and second webs ( $T_1$ ,  $T_3$ ) of dielectric materials, providing conductive wires (C), and laminating or bonding the webs and wires in a face-to-face layered relationship. (See generally Figure 1 and its description.) Harlow does not disclose stretching the bonded laminate. Hairabedian, also drawn to a cable fabrication method, teaches that stretching is used to achieve the final wire spacing. (See Col. 6, lines 42-52; Col. 7, lines 6-14.) It would have been obvious to one having ordinary skill in the art at the time the invention was made to stretch the resulting laminate in Harlow motivated by the fact that Hairabedian teaches to stretch the resulting laminate to adjust the spacing of the wires in the laminate and an artisan would appreciate that the same could be done in Harlow.

Art Unit: 1734

Regarding claim 11, Harlow teaches that in place conductive wires used, the artisan could choose to die-cut from copper foil and fed to the system.

Regarding claims 13 and 14, Harlow discloses the dielectric material used is a polymer film, such as polytetrafluoroethylene (PTFE).

Regarding claim 15, the PTFE in Harlow can be expanded or stretched prior to lamination. (Col. 2, lines 46-49.)

Regarding claim 16, PTFE is known to be porous, especially when stretched or sintered as is done in Harlow. (Col. 3, lines 19-22.)

3. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harlow in view of Hairabedian as applied to claim 9 above, and further in view of Ostman et al. (US Patent No. 4,085,502).

Regarding claim 10, Harlow in view of Hairabedian discloses feeding conductor wires. Ostman discloses feeding a conductive metal sheet (50) which cut or slit to form individual conductors before being laminated. (Col. 5, lines 34-53.) It would have been obvious to one having ordinary skill in the art at the time the invention was made that an alternative to using wires, as is done in Harlow in view of Hairabedian, would be to use a conductive sheet and slit the sheet into several conductors, as is done in Ostman. An artisan would be motivated to use a conductive sheet depending on the type of cable being formed and what kind of conductive material the artisan wishes to use.

Furthermore, Harlow teaches that the conductor material used therein can be die cut before being fed. (Col. 10, lines 25-29.)

Art Unit: 1734

4. Claims 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abuto et al. (US Patent No. 5,804,021) in view of Ness (US Patent No. 4,525,407).

Regarding claim 9, Abuto discloses a method of making a nonwoven laminate.<sup>1</sup> Abuto discloses providing a first and second web (14, 16) of dielectric materials and a third sheet (12) which is elastomeric and includes conductive material. (Col. 6, lines 14-47.) The sheets are bonded in a layered relationship as shown in Figure 8, but Abuto does not disclose stretching the laminate as required by the claim. Ness teaches that stretching causes the material to be more extensible. It would have been obvious to one having ordinary skill in the art at the time the invention was made to stretch the laminate in Abuto, thereby causing the laminate to be more extensible, as taught by Ness, motivated by the fact that the resulting laminate would be more extensible.

Regarding claim 12, Abuto discloses laminating the elastomeric layer with nonwoven layers (14, 16).

### ***Response to Arguments***

1. Applicant's arguments filed March 9<sup>th</sup>, 2006 have been fully considered but they are not persuasive.

2. With respect to applicant's argument that neither Harlow nor Hairabedian disclose providing a 'sheet', examiner disagrees. The term, 'sheet' is broad and must be interpreted as such. Harlow discloses an embodiment wherein copper circuits are

---

<sup>1</sup> Applicant's preamble of claim 9 which defines the method as "making an electrical cable." However, the preamble has not been given patentable weight because a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to

Art Unit: 1734

employed in place of wires (column 10, lines 25-29). These copper circuits meet the limitations set forth by the generic term 'sheet'.

3. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). As stated by applicant, Harlow does not disclose incrementally stretching the laminate. However, Hairabedian clearly teaches incremental stretching (column 6, lines 42-52; column 7, lines 6-14). It is the combination of these references, which is used to reject claims 9, 11, and 13-16. Therefore, claims 9, 11, and 13-16 are not patentable over Harlow in view of Hairabedian.

4. Applicant also argues there is no teaching to combine Ostman with Harlow in view of Hairabedian. In the previous action, in section 3, examiner states, 'an artisan would be motivated to use a conductive sheet depending on the type of cable being formed and what kind of conductive material the artisan wishes to use.' This motivation serves as the suggestion to combine Ostman with Harlow in view of Hairabedian. Secondly, applicant argues the combination does not teach a sheet of conductive material. The term 'sheet' is addressed above.

5. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208

---

stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Art Unit: 1734

USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). As stated by applicant, Abuto does not disclose incrementally stretching the laminate. However, Ness clearly teaches incremental stretching (column 1, lines 51-69). It is the combination of these references, which is used to reject claims 9 and 12. Furthermore, it is argued that Abuto in view of Ness does not disclose a sheet of conductive material. Abuto clearly discloses a sheet of conductive material (12; column 6, lines 14-53). Therefore, claims 9 and 12 are not patentable over Harlow in view of Hairabedian.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 1734

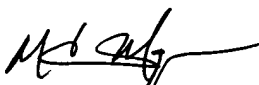
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly K. McClelland whose telephone number is (571) 272-2372. The examiner can normally be reached on 8:00 a.m.-5 p.m. Mon-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris A. Fiorilla can be reached on (571)272-1187. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



KKM

  
**CURTIS M. BATES**  
PATENT EXAMINER